

## MEDIACAST

Streaming media distribution via TV broadcast infrastructure (push VOD) **MEDIACAST** is a technology that allows delivery of digital media, such as video, music and photos over-the-air, using existing TV broadcast channels so broadcasters can distribute OTT content. Streaming video requires a consistent high bandwidth

internet connection, via cable or fiber. In many circumstances, such connection is not available, like in rural areas and in mobile networks.

**Delivery of digital media over wireless technologies is still unreliable and expensive.**

The **MEDIACAST technology** offers the possibility to provide OTT content without having to rely on third party broadband internet connections.

The **MEDIACAST solution** can be used for many different applications:

### Satellite, terrestrial TV broadcasters



Broadcasters can deliver on demand OTT movies, and music to users via their own TV broadcast channel, providing a new monetization opportunity with minimal new capital expense.

### Mobile devices/smartphones, tablets



The **MEDIACAST technology** allows broadcasters to add VOD applications to mobile devices equipped with mobile TV reception. By saving expensive mobile data transmission, this technology is extremely interesting for mobile devices and mobile movies reception, making both more realistic and economical in the near term.

The download is done onto the storage of the mobile device by the **MEDIACAST technology** via the mobile TV broadcast channels.

### Digital Signage operators



Digital signage operators can use TV broadcast channels to distribute large amounts of data to many terminals using low cost digital TV STB technology.

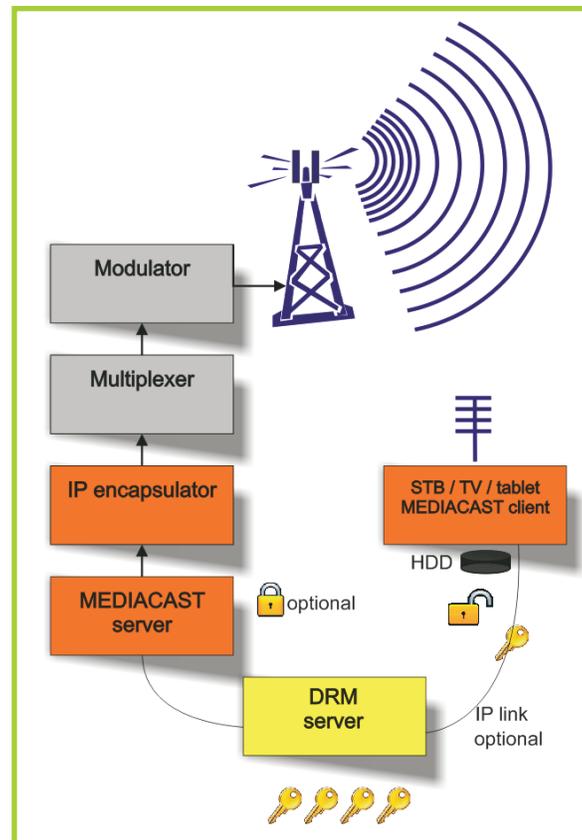
# What are the components?

The **MEDIACAST platform** consists of the following **elements**:

**MEDIACAST server**, which serves FEC encoded and encrypted digital media to the broadcast station

**MAINDATA IP encapsulator**, which encapsulates an IP stream into the TV broadcast stream

Broadcast receiver with **MEDIACAST client**, which can be a DVRs, STBs, TVs that have storage capability and mobile TVs, smartphones, tablets equipped with TV receiver and a low bandwidth internet back channel, that gets the decryption key from the DRM server and provide usage reports  
**MEDIACAST transmission** may utilize unused bandwidth of the TV broadcast station, therefore significantly reducing the costs of the total system setup.



## Key features

**Reliable delivery:** Utilizing lossy 1 way connectionless TV broadcast links with BFTP+ (Broadcast File Transfer Protocol) at the transmission layer, including strong 3D FEC and interleaving mechanism.

**Individual clients addressable:** Content can be addressed by MAC address of the DVR or other device, for the purpose of content protection and billing.

**Encryption:** Complies with AES 256 encryption algorithms can be integrated with various Conditional Access systems to comply with content protection / security requirements.

**Applicable to any digital television standard:** Includes satellite (DVB-S2 and DVB-S), terrestrial (DVB-T, DVB-T2, ATSC, ATSC-M/H, ISDB-T and ISDB-T (Tb)) and cable (DVB-C and DVB-C2) or multicast IP networks.



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